

CLAIMS:

1. An insufflation system comprising:
an insufflator having a delivery assembly for delivering insufflating gas from a pressurized source of insufflation gas to at least one gas delivery path;
at least one output line coupled to the at least one gas delivery path;
at least one dual-capacity tube having a first tube with a first end coupled to the at least one output line and a second end, the at least one dual-capacity tube having a pair of tubes each having a first end attached with the second end of the first tube; and
wherein the at least one dual-capacity tube provides for fluid communication of the insufflating gas between the insufflator and laparoscopic equipment that is insertable into a peritoneal cavity.
2. The insufflation system of claim 1, wherein the dual-capacity tube further comprises at least one valve attached to at least one of the pair of tubes, the valve for controlling the flow of insufflation gas.
3. The insufflation system of claim 2, wherein the at least one valve is a manual valve.
4. The insufflation system of claim 2, wherein the at least one valve operates hydraulically.
5. The insufflation system of claim 2, wherein the at least one valve operates pneumatically.

6. The insufflation system of claim 2, wherein the at least one valve operates electrically.

7. The insufflation system of claim 6, wherein the insufflator further comprises a controller and wherein the at least one valve operates via a signal from the controller.

8. The insufflation system of claim 2, wherein the at least one valve is a pressure relief valve that provides pressure relief when the insufflation gas reaches a predetermined pressure.

9. The insufflation system of claim 1, wherein the at least one dual-capacity tube further comprises a filter located within each of the pair of tubes.

10. The insufflation system of claim 1, wherein the at least one dual-capacity tube further comprises a filter located within the first tube.

11. The insufflation system of claim 1, wherein the at least one dual-capacity tube is disposable.

12. The insufflation system of claim 1 further comprising a second dual-capacity tube having a first tube that includes a first end, wherein the first end of the second dual-capacity tube is attached to one of the pair of tubes of the at least one dual-capacity tube.

13. The insufflation system of claim 1, wherein the first tube has an inner diameter at least as large as an inner diameter of each of the pair of tubes.

14. The insufflation system of claim 13, wherein the first tube of the at least one dual-capacity tube has an inner diameter of approximately 3/8 inches and wherein the pair of tubes each has an inner diameter of approximately 1/4 inches.

15. The insufflation system of claim 13, wherein the inner diameter of each of the pair of tubes is different from the other of the pair of tubes.

16. The insufflation system of claim 1, wherein the first tube is attached to the pair of tubes via a stepped adapter.

17. A multi-capacity tube for use with an insufflation gas during a surgical procedure, comprising:

- a first tube having a first end for attachment to an insufflator and a second end attached to a first end of an adapter;

- at least two tubes each having a first end attached to a second end of the adapter and a second end having a connector; and

- a laparoscopic surgical component attached to the connector on the second end of each of the at least two tubes;

- wherein the at least two tubes provide pathways for pressurized insufflation gas and wherein the laparoscopic surgical component is insertable into a peritoneal cavity.

18. The multi-capacity tube of claim 17 further comprising at least one valve attached to at least one of the at least two tubes, the at least one valve for controlling the flow of insufflation gas.

19. The multi-capacity tube of claim 18, wherein the at least one valve is a manual valve.

20. The multi-capacity tube of claim 18, wherein the at least one valve operates hydraulically.

21. The multi-capacity tube of claim 18, wherein the at least one valve operates pneumatically.

22. The multi-capacity tube of claim 18, wherein the at least one valve operates electrically.

23. The multi-capacity tube of claim 18, wherein the at least one valve is a pressure relief valve that provides pressure relief when the insufflation gas reaches a predetermined pressure.

24. The multi-capacity tube of claim 17 further comprising a filter located within at least one of the plurality of tubes.

25. The multi-capacity tube of claim 17 further comprising a filter located within the first tube.

26. The multi-capacity tube of claim 17, wherein the first tube and the at least two tubes are PVC tubing and are disposable.

27. The multi-capacity tube of claim 17, wherein the connector attached to the second end of the at least two tubes further comprises a valve configured to adjustably restrict the flow of insufflation gas.

28. The insufflation system of claim 17, wherein an inner diameter of the first tube is at least as large as an inner diameter of each of the at least two tubes.

29. The insufflation system of claim 28, wherein the inner diameter of each of the at least two tubes is different from at least one of the other of the at least two tubes.

30. An insufflation system comprising:
an insufflator having a delivery assembly for delivering insufflating gas from a pressurized source of insufflation gas to at least one gas delivery path;
at least one output line coupled to the at least one gas delivery path; and
at least one multi-capacity tube having a first tube with a first end coupled to the at least one output line and a second end, the at least one multi-capacity tube having at least two tubes each having a first end attached with the second end of the first tube and a second end;
at least one spike port attached with the second end of one of the at least two tubes, wherein the spike port prevents the flow of the insufflation gas through the attached one of the at least tube tubes until the at least one spike port is opened; and
wherein the at least one multi-capacity tube provides for fluid communication of insufflating gas between the insufflator and laparoscopic equipment that is insertable into a peritoneal cavity.

31. The insufflation system of claim 30, wherein the at least one multi-capacity tube further comprises a filter located within the first tube.

32. The insufflation system of claim 30, wherein the first tube has an inner diameter at least as large as an inner diameter of each of the at least two tubes.

33. The insufflation system of claim 32, wherein the inner diameter of each of the at least two tubes is different from at least one of the other of the at least two tubes.

34. An insufflation system comprising:
an insufflator having a delivery assembly for delivering insufflating gas from a pressurized source of insufflation gas;
at least one multi-capacity tube having a first tube with a first end coupled to the delivery assembly and a second end, the at least one multi-capacity tube having at least two tubes each having a first end attached with the second end of the first tube; and
at least two outputs each coupled to a second end of the at least two tubes of the multi-capacity tube.

35. The insufflation system of claim 34 further comprising a delivery tube attached to each output of the insufflator, wherein the delivery tube provides for fluid communication of the insufflating gas between the insufflator and laparoscopic equipment that is insertable into a peritoneal cavity.

36. A method for delivering insufflation gas to a peritoneal cavity comprising:
providing a source of insufflation gas to an insufflator;
attaching a first end of a multi-capacity tube to at least one port of the insufflator, wherein the multi-capacity tube has at least two second ends

having laparoscopic equipment attached to each of the at least two second ends;
and

inserting the laparoscopic equipment attached to the at least two second ends of the multi-capacity tube into the peritoneal cavity, wherein the insufflation gas flows from the gas source, through the insufflator and through the multi-capacity tube to the peritoneal cavity.